

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 1 to 33.

Claims 3 to 6, 8 to 12, 16 to 18, 21 to 28, and 29 to 33 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,409,975 and further in view of U.S. 2003/0555210 with regard to claim 3.

Further, claims 1, 2, 7, 13 to 15, 19 and 20 have been rejected under 35 U.S.C. 102(b) as anticipated by U.S. 5,409,975.

These rejections are respectfully traversed.

1. The present invention

The present invention is a polycarbonate copolymer comprising 5 to 95% of recurring unit formula (I) and 95 to 5 mol% of recurring unit of formula (II). Formula (I) is derived from BCF and formula (II) is derived from another bisphenol such as Bis-A.

In this regard, BCF and Bis-A stand for the following:

BCF: 9,9-bis(4-hydroxy-3-methylphenyl) fluorene i.e. bis cresol fluorene

Bis-A: 2,2-bis(4-hydroxyphenyl)propane

2. 35 U.S.C. 102

U.S. 5,409,975 (U.S. '975 hereinafter) discloses an aromatic polycarbonate copolymer obtained by reacting Bis-AF and at least one monomer selected from Bis-FL and Bis-AP (column 4, lines 10-12).

In this regard, Bis-AF, Bis-FL and Bis-AP stand for the following:

Bis-AF: 2,2-bis(4-hydroxyphenyl)-1,1,1,3,3,3-hexafluoropropane

Bis-FL: 9,9-bis(4-hydroxyphenyl)fluorene

Bis-AP: 1-bis(4-hydroxyphenyl)-1-phenylethane

The copolymer of the present invention has unobvious structural differences over the copolymer of U.S. '975 in the following two points.

Firstly, Bis-FL used in U.S. '975 does not have methyl moieties (-CH₃) on its benzene rings. On the contrary, BCF used in the present invention has two methyl moieties on its benzene rings. Please compare the formula (G) in column 3 of U.S. '975 and claim 1 of the present application.

Secondly, the moiety "W" of formula (II) of the present invention does not contain the fluorine moiety (-F). However, Bis-AF used in U.S. '975 as an essential component contains six fluorine moieties. Please compare formula (B) in column 3 of U.S. '975 with present claim 1.

Accordingly, the copolymer of the present invention is clearly different from that of U.S. '975. Thus, the present invention has novelty over U.S. '975.

3. 35 U.S.C. 103

The vapor derived from Bis-FL used in U.S. '975 is highly irritating to the skin. The polycarbonate copolymer comprising Bis-FL exhibits the problem of high water absorption (page 36, line 30 to page 37, line 7 of the specification). On the contrary, the copolymer of the present invention does not cause irritation to skin and does not have low water absorption. These differences are demonstrated in Example 32 and Comparative Example 14 (C. Ex. 14) of the present specification as tabulated below.

	Example 32	C. Ex. 14
Component	PC1 (BCF/Bis-A=50/50) 100 Parts by Weight	C-PC1 (Bis-FL/Bis-A=50/50)100 Parts by Wight
	Carbon Fibers 20 Parts by Weight	Carbon Fibers 20 Parts by Weight
Deflection Temperature under Load (°C)	192	195
Conductivity (Ω)	10 ⁴	10 ⁴
Water Absorption (wt%)	0.16	0.26
Irritation	○	x

U.S. '975 is silent about these problems caused by Bis-FL. Accordingly, the present invention has unobviously advantageous effects which are neither disclosed nor suggested by U.S. '975, in addition to the above discussed significant structural differences.

U.S. 2003/0555210 (U.S. '210 hereinafter)

U.S. '210 is directed to a polyamide resin. U.S. '210 is totally silent about polycarbonates. Thus, U.S. '210 is irrelevant to the present invention.

4. Conclusion

The present invention has an unobviously advantageous effect over U.S. '975 in addition to significant structural differences. U.S. '210 is irrelevant to the present invention.

In sum, the present invention is not obvious from U.S. '975 in view of U.S. '210. Accordingly, the 103 rejection should be withdrawn.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

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